

IN THE SPECIFICATION

Please amend as follows:

On page 7, please replace paragraph 2 with the following:

FIG. 1 illustrates the compression scheme used in the present invention. FIG. 1A shows the absolute coordinates of R0 ~R3. FIG. 1A FIG. 1B shows that the coordinates of R1 ~R3 represented relatively to the lower left corner of R0. These relative coordinates have a less number of significant bits than absolute coordinates. FIG. 1C shows the coordinates of R1 ~ R3 quantized into 16 levels or four bits by cutting off trailing insignificant bits. The resultant MBR is called quantized MBR (“QRMBR”). Note that QRMBRs can be slightly larger than original MBRs.

On page 12, please replace paragraph 2 under RMBR Technique with the following:

One way to compress is to represent keys relatively to a reference MBR within a node. If the coordinates of an MBR are represented relative to the lower left corner of its parent MBR, the resultant relative coordinates have many leading 0's. In the relative representation of MBR (“RMBR”), cutting off these leading 0's make it possible to effectively reduce the MBR size.